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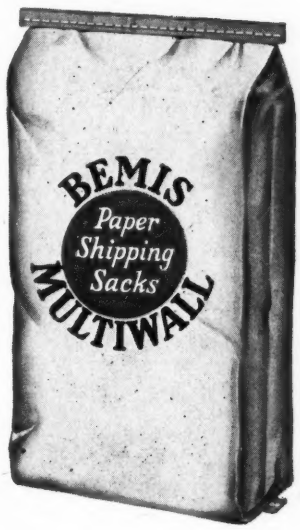


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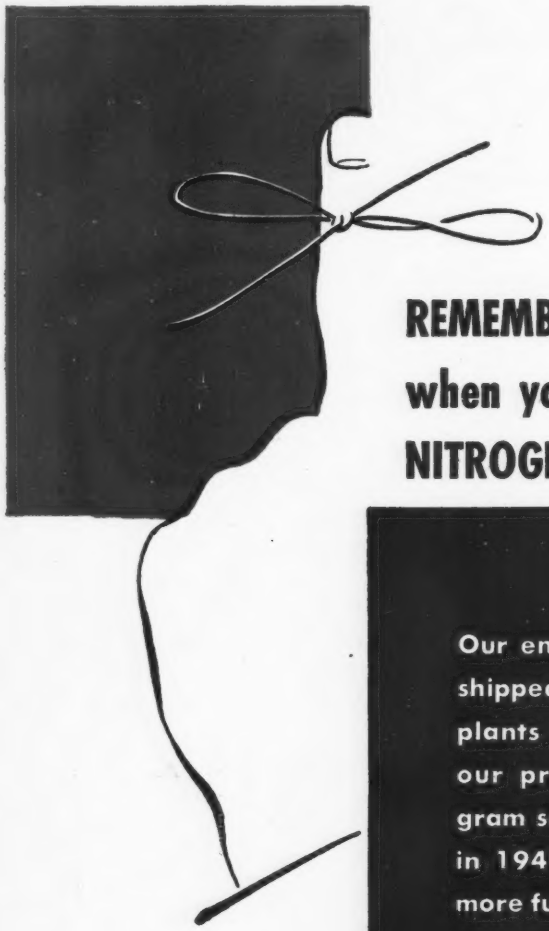

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The American FERTILIZER

Vol. 110 JUNE 25, 1949 No. 13

# The N. F. A. Convention

**Record Attendance of over 600 Hears Noted Speakers on Farm Problems at White Sulphur Springs, June 13-15. King Re-elected Chairman of Board and Coleman Continued in Office of President**

WITH an attendance of more than 600, the 24th Annual Convention of the National Fertilizer Association, held at the Greenbrier, White Sulphur Springs, W. Va., on June 13th, 14th and 15th, was one of the most successful and enjoyable meetings in the long history of the Association. The speakers at the general sessions were leaders in their various fields and presented a wealth of valuable information. The weather was ideal and the different sports tournaments and recreational features received a large number of entrants.

In the talks at the meetings, emphasis was placed on the need for additional educational work in every branch of the agricultural field, particularly where fertilizer usage is involved. The various agricultural experiment stations are giving excellent cooperation and the Association is doing its share in the production of another motion picture, in encouraging additional research, and in the publication of a revised edition of its standard work "Hunger Signs in Crops."

### Officers and Directors Elected

The Nominating Committee, under the chairmanship of Weller Noble, met on June 13th, and nominated the following as Directors-at-large: M. S. Hodgson, Empire State Chemical Company, Athens, Ga.; John E. Powell, Smith Agricultural Chemical Company, Columbus, Ohio; J. E. Totman, Summers Fertilizer Company, Baltimore; Ralph E. Fraser, Northern Chemical Industries, Bangor, Maine. All were elected unanimously at the meeting on June 14th.

District directors chosen are B. B. Fall, Rogers and Hubbard Company, Portland, Conn., district 1; L. Graham Campbell, Chamberlin & Barclay, Cranbury, N. J., district 2; W. Newton Long, Miller Chemical & Fertilizer Corporation, Baltimore, district 3; F. N. Bridgers, Farmers Cotton Oil Company, Wilson, N. C., district 4; J. L. Nichols, Sumter Fertilizer Mfg. Company, Sumter, S. C., district 5; L. D. Hand, Pelham Phosphate Company, Pelham, Ga., district 6; Moultree J. Clement, Merchants Fertilizer & Phosphate Co., Pensacola, Fla., district 7; Weller Noble, Pacific Guano Company, Berkeley, California, district 12.

The new board held a business meeting immediately following the close of the convention on June 15th, and elected the following officers for the ensuing year: Ray King, Chairman of the Board; J. E. Totman, Vice-Chairman of the Board; Russell Coleman, President, Daniel S. Murph, Secretary and Treasurer.

In appreciation of this service to the Association over many years, the Board presented to its former chairman, Weller Noble, and to Mrs. Noble, a set of airplane luggage.

### General Session, Wednesday, June 14th

In opening the first of the two general meetings, Ray King, Chairman of the Board of Directors, reviewed the prospects for material supplies during the coming fertilizer year. He estimated that, due to increased production capacities and changes in nitrogen-allocation programs, fully .220,000 tons of additional nitrogen will be available for use

in the 1949–50 crop-planting year, an increase of 23 per cent over the year before. The amount exported will probably be lower because of discontinuance of the FAO allocation program and of Army exports to Europe.

Superphosphate production may increase by 15 per cent and potash by 10 to 12 per cent over last year, he said, adding that more than 17,500,000 tons of mixed fertilizer should be available for 1949–50.

Mr. King also asked members to be on guard against pending legislation, such as the Keefe and Lemke bills, increasing federal controls over the industry, and the "Econnomic Stability Act of 1949" which would permit the Government to construct and operate plants for the production of any essential material should the President decide that there was an existing or threatened critical shortage of that material. If this latter bill should become law, he said, no further authority would be needed for putting the Government into the fertilizer business in competition with private enterprise.

Mr. King also paid a tribute to the work of President Russell Coleman and the members of his staff for their accomplishments during the past year. He mentioned some of the projects for the coming year which include another film being prepared by the Plant Food Research Committee having to do with increasing per-acre profits.

"The world can feed itself," said Louis Bromfield, noted writer, "if it wants to badly enough," in his address which followed on the program. Much remains to be learned today, however, beyond what we have already learned, about productivity of the soil.

"A cubic foot of soil is a community of living organisms in which every law of the Universe is in operation," he continued. Because the production of good crops is governed by laws, just as are chemistry, physics and other exact sciences, agriculture is one of the most complex of professions.

Medical science is now closely allied with the farmer, Mr. Bromfield said, in the continuing fight against soil disease because of increased awareness of the relation of health to the maintenance of "nature's balance" in the soil. To maintain this balance, chemical fertilizer is indispensable in getting the most out of organic matter in the soil. Mr. Bromfield praised "Hunger Signs in Crops," the nutrient-deficiency study published by NFA and the American Society of Agronomy, for its part in bringing essential information to the farmer.

**Soil Experts Discuss Problems**

In his address, "Fertility Levels and the Quality of Canning Crops," Charles H. Mahoney, director of the Raw Products Research Bureau, National Canners Association, called upon the canning and the fertilizer industries to work hand-in-hand in presenting to the public more factual information on the nutritive value of food as influenced by soils, climate and fertilizer.

Mr. Mahoney said "I think it behooves us all through our sales force to talk to the farmers and give them factual information which is perfectly sound on methods for adequately producing canning crops."

As an example of educational possibilities he cited the connotation of "fertilizer placement" which all too often is construed merely as referring to band application or plowing under. Actually, he said placement should refer also to "the application of fertilizers to cover crops and building the soil fertility in the rotation."

Mahoney credited much of the increased per-acre production of fruit and vegetable crops since the early 1930's to better knowledge of soil fertility and of fertilizer application.

The closing address of the session was by Dr. George N. Hoffer, manager of the Midwest Office of the American Potash Institute. Using Kodachrome slides, Dr. Hoffer graphically illustrated his talk on "Soil Factors Affecting Responses of Crops to Fertilizers." The slides showed the effects of compaction of the soil from the abrasions and pressure exerted by farm machinery, resulting in poor condition of organic matter and lowered quality of the crops. Practices allowing oxygen to reach plant roots are absolutely essential, he said, and proper attention must be given to soil structure.

Dr. Hoffer advocated the use of deep-rooted leguminous crops as a means of correcting the undesirable physical condition resulting from improper soil management. His pictures illustrated how such crops break up the compact layers of soil and provide organic matter at a greater depth in the soil profile, thus improving its physical and chemical properties. In order for commercial fertilizers to be used most beneficially by crops, he said, the soils to which they are applied must be under proper soil management; otherwise the farmers using commercial fertilizer may be disappointed in the results.

(Continued on page 24)

# Our Industry's Safeguards*

By DR. RUSSELL COLEMAN

*President, the National Fertilizer Association*

MAINTAINING world leadership is a challenge which has been thrown at the United States, and the most important problem confronting our Nation today is whether or not it can meet this challenge. World leadership to most of our people means either producing superior diplomatic moves to preserve the peace or maintaining superior military forces to win wars. To our Nation's life these are essential but they should not be permitted to obscure the necessity to our Nation for the survival of its soul—free peoples with productive soils. The loss of our freedom or of our soil's fertility could mean suicide to our Nation regardless of its diplomatic or military successes.

The United States has become and has remained the world leader not so much because of the natural resources which it possesses, but because of the American incentive and ingenuity in developing its resources. The free enterprise system with its freedom for capital and labor is the spirit which has made our country great. This system is the reason that our industry can produce more goods than all other countries and in so doing can pay its labor two and one-half times as much as is paid to labor in socialist England and ten times as much as in communist Russia. Even greater accomplishments can be had if our people remain free and our scils productive.

What can our fertilizer industry do to play its part in protecting our Nation and thus safeguarding itself against those enemies who would destroy us?

First, let us review briefly some of its past contributions to this problem. One hundred years ago chemical fertilizers were not being produced in America, and our soil fertility was being depleted rapidly without any readily available supply of plant food for replacement. Even 50 years ago the fertilizer industry was in its infancy, meeting agriculture's demand with only 2,200,000 tons of fertilizer; at that time all of the potash and nitrogen had to be imported at relatively high costs. Even before its importance to the Nation's welfare was appreciated, the fertilizer industry recognized the necessity of producing better fertilizer cheaper as a definite requirement for a healthy nation. It learned how and built facilities to produce synthetic nitrogen. Tremendous facilities for mining and processing the potash salts found in the United States have also been built. It has found improved methods of mining rock phosphate and producing superphosphate as well as improve the quality of mixed fertilizers. Thus, American ingenuity has met the challenge and during the current year the industry will produce more than 16 million tons of chemical fertilizers. Without its contribution the American farmer would produce 20 per cent less commodities, and the cost of all farm products would be appreciably higher to the consumer. The industry can be justly proud of its past record because it has not only produced fertilizers in ever increasing quantity, but has also increased the quality of its products at lower relative costs and has passed these benefits on to the American farmer and consumer. So let's pat ourselves on the back for meeting the obligations of the past and plan as to how we can best safeguard our future.

The problems of the fertilizer industry will probably be much more complex in the future than they have been in the past. The constantly increasing population of our Nation will place increased demands upon the farm for more and better quality products. Such demand will naturally speed up the removal of plant food nutrients, thereby endangering the productivity of our soils. To maintain our soil's fertility will require more research on the kind of materials and mixtures needed by the soil, but certainly more fertilizers, perhaps with an increasing number of elements, will be required. Increased competition at home and abroad will probably force increased efficiency on the farm, thereby requiring the farmer to produce more profit per acre. There will probably be more and more demand for higher analysis fertilizer materials and mixtures to reduce the per-unit cost on the farm. A more complex society will indeed increase the problems of the fertilizer industry, and since the supply of fertilizers is essential to maintaining our soil's fertility and our Nation's survival, the

(Continued on page 26)

* An address before the 24th Annual Convention, The National Fertilizer Association, White Sulphur Springs, West Va., June 15, 1949.

## Convention Notes

The pasture demonstration trip on Monday, which was conducted by the Plant Food Research Committee, was well attended. Five farms in West Virginia were visited, and at the last farm the visitors were given a chance to exhibit their fishing skill. From accounts that have filtered through, the pasture demonstration was more successful than the fishing demonstration.

* * *

As in previous years, one of the convention highlights was the cocktail party given by the Internation Minerals and Chemical Corporation. Maurice Lockwood and his associates did a good job at making everyone feel right at home in the N. G. A. fellowship.

* * *

The Board of Directors made a wise choice in the selection of James E. Totman, president of Summers Fertilizer Co., as vice-chairman of the board, to succeed C. T. Prindeville who declined re-election. Mr. Totman has rendered valuable service to the association over the past years and has a thorough knowledge of industry problems.

* * *

It is quite an undertaking to see that 600 people are made to feel welcome at a big convention but the Hospitality Committees under Mrs. J. P. Brinton, Jr., chairman of the ladies' group and A. Norman Into, chairman of the men's group, did a superlatively good job.

* * *

They say that good toastmasters are born, not made. If this is so, where has Charles S. Rauh been hiding his light all these years. With such a fund of stories, don't be surprised to see Charlie crowding Milton Berle out of the television spotlight one of these days.

* * *

The budget for the year 1949-1950, which was adopted by the convention, calls for expenditures totaling $237,000. Included in the budget was a new plan for retirement of members of the Association's headquarters staff. The pro rata dues schedule was continued without change.

* * *

The Convention ended with the solemn memorial service for those members of the industry who have died during the past year. The record was presented by J. Rucker McCarty, who paid tribute to their services to the industry.

## N. F. A. OLYMPICS

The recreational features of the convention were enjoyed by a greater number than at any previous gathering. The entry lists for the various events were well filled and some interesting competition developed. Too much credit cannot be given to the various committees who handled the contests, under the following chairmen: Golf and Men's Golf Events, A. L. Walker, Jr.; Ladies' Golf Events, Mrs. J. E. Totman; Tennis, James C. Totman; Bridge, Mrs. Burton A. Ford; Horseshoe Pitching, A. A. Schultz.

### Men's Golf Contests

*Monday, June 13th*

*Low Gross:* Winner, Watts Gunn, Chilean Nitrate Sales Corporation, Atlanta; runner-up, R. H. Linderman, International Minerals and Chemical Corporation, Chicago.

*Medal Play:* Winner, Charles F. Martin, Miami Fertilizer Company, Xenia, Ohio; runner-up, J. P. Margeson, Jr., I. M. C. C., Chicago. *Match Play vs. Par:* L. Ralph Boynton, U. S. Potash Company, Atlanta; runner-up, T. E. Bradley, Potash Company of America, Peoria, Ill.

*Kickers' Handicap:* Winner, Tom L. Jones, Arkell and Smiths, Columbus, Ohio; runner-up, Morton S. Hodgson, Empire State Chemical Company, Athens, Ga.

*Cyanamid Cup Winners:* R. S. Tyson, Arkell and Smiths, Frederick, Md.

*Tuesday, June 14th*

*Low Gross:* Winner, Baxter Dungan, Universal Paper Bag Company, New Hope, Pa.; runner-up, W. A. Bridgers, Agricultural Products Laboratory, Wilson, N. C.

*Medal Play:* Winner, R. S. Tyson; runner-up, Fred P. Bryan, Chilean Nitrate Sales Corporation, Raleigh, N. C.

*Match Play vs. Par:* Winner, Howard C. Peterson, Jr., Arkell and Smiths, Canajoharie, N. Y.; runner-up, James A. Naftel, Pacific Coast Borax Company, Auburn, Ala.

*Kickers' Handicap:* Winner, Gene Van Deren, Blue Grass Plant Foods, Inc., Cynthiana, Ky.; runner-up, James C. Totman, Summers Fertilizer Company, Bangor, Maine.

*Veterans Tournament:* B. H. Jones, Sunland Industries, Inc., Fresno; second, B. W. Bellinger, Tennessee Corporation, Tampa; third, J. E. Barnes, U. S. Potash Company, New York.

*Guest Golf Tournament:* Low gross winner, W. F. Watkins, ECA, Washington. Low gross runner-up, Jack B. Snyder, Snyder

Chemical Company, Topeka. Match play winner, Sydney K. Bradley, Union Bag and Paper Corporation, New York. Match play runner-up, W. W. Johnson, Smith-Douglass Company, Norfolk.

*Kickers' Handicap:* Winner, George H. Heilig, Norfolk; runner-up, Richard A. Brown, Dickerson Company, Philadelphia.

*Wednesday, June 15th*

*Low Gross:* Winner, A. A. Jones, Decatur Fertilizer Company, Decatur, Ala.; runner-up, Herbert A. C. Rauchfuss, Woodward & Dickerson, Inc., Philadelphia.

*Medal Play:* Winner, J. L. Baskin, IMCC, Orlando, Fla.; runner-up, F. T. Techter, Barrett Division, New York.

*Match Play vs. Par:* Winner, J. Porter Brinton, Jr., Hydrocarbon Products Company, New York; runner-up, F. W. Darner, U. S. Phosphoric Products, Tampa.

*Kickers' Handicap:* Winner, C. E. Lightfoot, Potash Company of America, New York; runner-up, J. B. McConnaughey, Kentucky Fertilizer Works, Winchester, Ky.

**Ladies' Golf Contests**

*Low Gross:* Mrs. Charles S. Rauh, Indianapolis, winner; Mrs. Baxter Sparks, Norfolk, runner-up.

*Low Net:* Mrs. W. W. Johnson, Cleveland, winner; Mrs. Edward W. Forkin, Green Bay, Wis., runner-up.

*Kickers' Handicap:* Winner, Mrs. R. F. Terhune, Winchester, Ky.; runner-up, Miss Janet Howe, York.

*Golfers' Putting:* Mrs. G. H. Gleason, New York, winner; Mrs. C. W. Knowles, Little Rock, runner-up.

*Non-golfers' Putting:* Winner, Mrs. Vernon Bishop, Lebanon, Pa.; runner-up, Mrs. John B. Ritter, Las Cruces, N. Mex.

*Ladies' Guest Golf:* Winner, Mrs. John Kingham, Indianapolis.

**Tennis**

*Men's Singles (finals):* George H. Dunklin, Planters Fertilizer Company, Pine Bluff, Ark., defeated Dean R. Gidney, United States Potash Company, New York.

*Ladies' Singles (finals):* Mrs. G. Frank Seymour, Goldsboro, N. C., defeated Mrs. Jacques Humbert, New York.

*Men's Doubles (finals):* Miguel Tegtmeyer, Synthetic Nitrogen Products Corporation, New York and Richard A. Brown, Dickerson Company, Philadelphia, defeated Dean R. Gidney, U. S. Potash Company, and John L. Cope, Reliance Fertilizer Company, Savannah.

*Mixed Doubles (Finals):* Mr. and Mrs. George H. Dunklin defeated Wiley Ellis, New Albany, Ind., and Mrs. Jack Weldon, Indianapolis.

**Horseshoe Pitching**

*Doubles:* W. E. Schnaffnit, Stedman's Foundry and Machine Works, Philadelphia, and William Lehman, Chilean Nitrate Sales Corporation, White Plains, N. Y., took first prize; the runners-up were Larry Long, "Agricultural Chemicals," New York, and J. H. Tom Counce, Chase Bag Company, New Orleans.

*Singles:* Winners were Thomas B. Athey, Albemarle Paper Mfg. Co., Richmond, Va., and E. A. Geoghegan, Southern Cotton Oil Company, New Orleans. Runners-up were Howard A. Parker, Sylacauga Fertilizer Company, Sylacauga, Ala., and Larry Long.

**Bridge Tournament**

*Tuesday, June 14th*

First-prize winners in Tuesday's tournament were Mrs. W. E. Snyder, Los Angeles; Mrs. M. A. Caine, New York; Mrs. L. E. Little, Indianapolis; Mrs. C. W. McNeilly, Seaford, Del.; Mrs. Walter Crady, Louisville; Mrs. Jack B. Snyder, Topeka; Mrs. Marshall A. Smith, Columbus, Ohio; Mrs. B. M. Machen, Montgomery, Ala.; Mrs. L. G. Black, Corning, Ark.; Mrs. Trenton Tunnell, Atlanta; Mrs. W. Gedge Gayle, Lake Charles, La.; Mrs. C. T. Prindeville, Chicago; Mrs. John E. Powell, Columbus, Ohio; and Mrs. G. H. Gleason, New York.

Second-place winners on Tuesday were Mrs. Graham Dudley, Memphis; Mrs. L. S. Kaniecki, Atlanta; Mrs. Wiley Ellis, New Albany, Ind.; Mrs. T. E. Bradley, Peoria, Ill.; Mrs. Charles H. Macdowell, Winter Park, Fla.; Mrs. C. G. Franklin, Pittsburgh; Mrs. Bert Evans, Montgomery, Ala.; Mrs. F. E. Lange, Walnut Ridge, Ark.; Miss Peggy Schmelzer, Columbus, Ohio; Mrs. W. F. Williamson, Jr., Baton Rouge; Mrs. A. W. Noland, Lake Charles, La.; Mrs. W. J. Murphy, New York; Mrs. W. D. Lamb, Pittsburgh; and Mrs. C. D. Shallenberger, Shreveport, La.

*Wednesday, June 15th*

Winners of first prizes in Wednesday's tournament were Mrs. W. B. Porterfield, Richmond; Mrs. Travis Whitsel, Atlanta; Mrs. M. G. Field, Hattiesburg, Miss.; and Mrs. Paul Clute, Las Cruces, N. Mex. Second-prize winners were Mrs. Ralph Boynton, Atlanta; Mrs. Ben W. Merz, Philadel-

(Continued on page 26)

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Vol. 110 JUNE 25, 1949 No. 13

## *Principal Articles in This Issue*

| | PAGE |
|---|---|
| THE N. F. A. CONVENTION | 7 |
| OUR INDUSTRY'S SAFEGUARDS, *by Dr. Russell Coleman* | 9 |
| Convention Notes | 10 |
| N. F. A. Olympics | 10 |
| House Committee Urges Reduction in Army Nitrogen Exports | 12 |
| Report on Wyoming Phosphate Deposits | 13 |
| Support Continued for Radioactive Fertilizer Research | 13 |
| Plant Vigor Related to Fertility Level | 13 |
| May Tax Tag Sales | 14 |
| FERTILIZER MATERIALS MARKET | |
| New York | 15 |
| Charleston | 16 |
| Philadelphia | 16 |
| Chicago | 18 |
| Davison Moves Baltimore Offices to New Quarters | 20 |
| Cotton Council Urges Use of Cotton Fertilizer Bags | 20 |
| April Superphosphate | 22 |
| St. Regis Develops New Moisture Proof Kraft Bag | 22 |

## House Committee Urges Reduction in Army Nitrogen Exports

A recent recommendation by the fertilizer subcommittee of the House of Representatives Committee on Agriculture will, if adopted, change considerably the fertilizer nitrogen picture for 1949–50. During the past year, the outfit of the Cactus Ordnance plant, which had been sold to Phillips Petroleum Co., as well as that of the Morgantown, Ohio River and San Jacinto plants, has been used to meet Army nitrogen fertilizer requirements in the European Recovery Program as well as in Japan and South Korea. The bill recommended by the subcommittee would release the Cactus plant output for domestic needs and limit the export nitrogen to the production of the other three plants.

The Army recently asked for bids on the Ohio River plant for sale or lease to private industry and the new plan would cause a withdrawal of this plant from the market.

The committee would place a maximum of 280,000 tons of nitrogen to meet E. C. A. requirements and military commitments. While this is more than the output of the Morgantown, Ohio River and San Jacinto plants, the committee feels that 280,000 tons is more than is actually needed in the export program.

For example, it is planned to ship 150,000 tons of nitrogen to Southern Korea during the fiscal year 1950. The largest prewar consumption of fertilizer nitrogen in that country was 86,885 tons in 1938. This averages 21 pounds per acre of arable land and the proposed quota for 1950 would increase this to 37 pounds per arable acre. In comparison, the United States averages three pounds of fertilizer nitrogen per arable acre. The committee feels that such an amount of nitrogen could not be used effectively in Korean agriculture.

As regards its recommendation that the three Army plants be continued in operation to meet the export fertilizer needs of the country, the committee noted that the Army is desirous of leasing or selling the Ohio River plant to private industry, but it was afraid that if the plant is disposed of there would be no assurance that it would be continued in operation to make fertilizer nitrogen.

"The Army is known to be desirous of disposing of the Ohio River Plant," the report said. "If left to its own devices under its general authorization, there is nothing to prevent the Army from selling

or leasing the Ohio River plant under terms which would permit that plant to be used for the production of material other than fertilizer nitrogen. There is, in fact, the strong probability that if Ohio River were leased in the near future without any stipulations such as those contained in this resolution, that it would be converted immediately to the production of methanol. In that case, in lieu of the production from this plant, the Army would probably take all or a major part of the production of the former Army plant at Etter, Tex., which has been leased to private industry and is in a position to provide much needed nitrogen fertilizer in a part of the country where available supplies of that material are the scarcest. The committee feels that such a situation would be most adverse to the welfare of American agriculture."

The concluding recommendations of the committee were that Congress repeal the sections of the second decontrol act which required the Army to meet 50 per cent of the fertilizer export requirements of the International Emergency Food Committee program, and the provision of the ECA appropriation act of last year directing the Army to make available 10 per cent of its anhydrous ammonia production to private industry.

The 50 per cent export requirement is no longer needed since world control of nitrogen distribution is being dropped June 30th by the IEFC and the committee said that the 10 per cent program is no longer needed since available supplies of anhydrous ammonia from private sources are sufficient to meet needs.

## Report on Wyoming Phosphate Deposits

The U. S. Bureau of Mines has recently issued a report of investigations on two phosphate rock deposits in Fremont County, Wyoming. Bureau engineers made a number of drillings and also sank a 75-foot shaft to obtain a 50-ton sample for testing. The report includes topographic and geologic plan maps, logs of drill holes, analyses of samples, description of the deposits, etc. It is pointed out that this deposit is nearer the Great Plains agricultural area than present producing districts in the Rocky Mountain region. A copy of the report can be obtained without charge from the Publication Section of the Bureau of Mines, 4800 Forbes St., Pittsburgh 13, Pa.

## Support Continued for Radioactive Fertilizer Research

The Fertilizer Industry Committee on Radioactive and Tagged Element Research reports that their appeal for funds to continue this research during 1949–50 has met with a satisfactory response. Contributions totaling $21,500 have been received which, with a balance of $563 remaining from the 1948–49 fund, will provide the means to continue this work for a third consecutive year.

The companies contributing are: American Cyanamid Co., Armour Fertilizer Works, The Baugh & Sons Co., The Consolidated Mining & Smelting Co. of Canada, Consolidated Rendering Co., Cooperative G.L.F. Exchange, Inc., The Davison Chemical Corp., Eastern States Farmers' Exchange, Georgia Fertilizer Co., International Minerals & Chemical Corp., Knoxville Fertilizer Co., Mutual Fertilizer Co., Naco Fertilizer Co., Northern Chemical Industries, Inc., Reading Bone Fertilizer Co., Robertson Chemical Corp., Smith-Douglass Co. Inc., Southern Fertilizer & Chemical Co., Swift & Co., Tennessee Corp., Texas Gulf Sulphur Co., I. P. Thomas & Son Co., Virginia-Carolina Chemical Corp.

In addition, the Anaconda Copper Mining Co. has made a special contribution to the University of Colorado on a radioactive research project. The project is included in the general research program sponsored by this Committee.

## Plant Vigor Related to Fertility Level

In the March 5, 1949, issue of the Massachusetts Commercial Vegetable Grower Leaflet, Professor C. L. Thompson, Extension Specialist in Vegetable Gardening, comments on plant nutrition as follows: "It is well known that the health, vigor, and nutritional level of at least some crop plants have a direct bearing on their susceptibility or resistance to certain fungus and bacterial diseases. Insufficient potash and too much nitrogen are frequently associated with marked susceptibility to certain diseases." He points out that, "Plant pathologists in Connecticut grew tomato plants at three different levels of nutrition, by varying the amount of a complete fertilizing ration, and inoculated the plants with the organism of the Fusarium wilt disease. The plants under the moderate or so-called X level developed severe disease, those at 0.1X level developed only a small amount of disease, while those with 10X nutrition level showed no symptoms at all."

## May Tax Tag Sales

Sales of fertilizer tax tags during the first five months of 1949 were far greater than for any comparable period on record. The latest compilation, which includes the May figure of 684,000 equivalent short tons reported to The National Fertilizer Association by control officials in the 13 States which maintain tag sale programs, reveals that from January through May, tax tags sufficient to cover 6,329,000 tons of fertilizer were purchased. This figure represents an increase of approximately 15 per cent over the total reported for the same period a year earlier. During the first eleven months of the current fiscal year, 9,252,000 equivalent short tons have been recorded—more than during all of 1948 and more than during the whole previous fiscal year.

The May total of 684,000 tons was about 13 per cent higher than that of May 1948. Although the tonnage reported for the Midwestern States was somewhat lower than that of 12 months earlier, the Southern States exceeded their May 1948 figure by almost 90,000 tons or 18 per cent. Cumulative figures on both a calendar and fiscal year basis, however, show substantial tonnage increases for each of the two geographic areas. In the South, seven of the nine reporting States show higher tonnages for May 1949 than for May 1948; eight of the nine show increases in cumulative calendar year figures over those of a year earlier; and eight show higher fiscal year totals.

As new legislation in Texas no longer requires the use of tax tags, the figures for that state are not included in the summaries.

FERTILIZER TAX TAG SALES
(In Equivalent Short Tons)
Compiled by the National Fertilizer Association

| State | May | | *Calendar Year Cumulative* January-May | | *Fiscal Year Cumulative* July-May | |
|---|---|---|---|---|---|---|
| | 1949 | 1948 | 1949 | 1948 | 1948–49 | 1947–48 |
| Virginia | 56,841 | 44,997 | 477,044 | 425,515 | 667,950 | 650,697 |
| North Carolina | 67,695 | 76,437 | 1,255,292 | 1,054,367 | 1,719,230 | 1,574,405 |
| South Carolina | 20,282 | 36,650 | 743,662 | 619,268 | 979,602 | 958,860 |
| Georgia | 79,499 | 58,891 | 988,414 | 894,071 | 1,248,377 | 1,106,589 |
| Florida | 69,448 | 55,965 | 452,455 | 378,639 | 800,629 | 822,520 |
| Alabama | 152,220 | 107,606 | 802,242 | 706,954 | 988,606 | 853,406 |
| Tennessee | 77,528 | 69,972 | 296,068 | 259,878 | 437,640 | 378,139 |
| Arkansas | 49,868 | 34,793 | 231,720 | 129,219 | 320,128 | 174,583 |
| Oklahoma | 1,500 | 1,450 | 71,010 | 73,746 | 116,260 | 113,203 |
| *Total South* | 574,881 | 486,761 | 5,317,907 | 4,541,657 | 7,278,422 | 6,632,402 |
| Indiana | 61,809 | 48,813 | 338,228 | 338,675 | 845,303 | 811,805 |
| Kentucky | 22,315 | 47,020 | 326,539 | 332,767 | 537,868 | 548,164 |
| Missouri | 24,019 | 16,096 | 285,981 | 222,334 | 471,737 | 339,347 |
| Kansas | 692 | 6,280 | 60,731 | 52,255 | 118,329 | 126,935 |
| *Total Midwest* | 108,835 | 118,209 | 1,011,479 | 946,031 | 1,973,237 | 1,826,251 |
| *Grand Total* | 683,716 | 604,970 | 6,329,386 | 5,487,688 | 9,251,659 | 8,458,653 |

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# FERTILIZER MATERIALS MARKET

# NEW YORK

**New Sulphate of Ammonia Contract Prices Show No Advance. Better Supply Reported. Ammonium Nitrate Demand Still Good. Organics Market Quiet with Some Price Drops. No Superphosphate Contract Prices Announced. Potash Production Mostly Under Contract for Next Year**

NEW YORK, June 22, 1949.

### Sulphate of Ammonia

Producers have announced prices and sent out contracts for the coming year at the same price basis as last year's contracts. Prices range from $45.00 to $48.00 per ton, f.o.b. production points, according to location. The demand for this material is not quite as heavy as it was several months ago and buyers have no trouble in filling their needs.

### Nitrate of Soda

No change in prices was noted but the supply situation was better and material is available for prompt shipment from most ports.

### Ammonium Nitrate

The supply situation was said to be a little better, now that the fertilizer season is over, but the demand is still good and some buyers have not been able to obtain all their needed supplies. Some export inquiry was noted but few actual sales.

### Nitrogenous Material

There were a number of inquiries in the market for future shipment but some producers preferred to hold off quoting until they could get a better picture of the possible market in the future.

### Organics

The organic fertilizer market was quiet with the end of the fertilizer season at hand. There was a steady demand from the feed trade tankage and blood with last sales made at $8.00 to $8.50 per unit of ammonia ($9.72 to $10.33 per unit N), f.o.b. shipping points. Most producers were sold ahead. Soybean meal was stronger and last sales were made on basis of $61.50 per ton, f.o.b. Decatur, Ill., in bulk. Cottonseed meal was well sold up for quick shipment and supplies are not plentiful. Linseed meal was weak, due to lack of demand as the main feeding season for this material has passed.

### Fish Meal

With fishing boats operating from most points, a better supply of this material is looked for and already some easing is noted in the price. Some material for prompt shipment sold at $170.00 per ton, f.o.b. Eastern shipping point. The fishing was said to be fair.

### Castor Pomace

With production on a curtailed basis, producers were unable to offer any material for nearby shipment. Whether the production will be increased in the fall is hard to determine at the present time.

### Hoof Meal

The demand for this material from the fertilizer grade has fallen off but some sales were made to industrial buyers on the basis of $7.00 per unit of ammonia ($8.51 per unit N), f.o.b. shipping points.

### Bone Meal

There is still a shortage of this material for both prompt and future, shipment with most material going to the feed trade who seem to be very short. Some offerings of imported material were noted but this was mostly for feed use.

### Superphosphate

No new prices have been announced as yet for the coming season but little change in price is expected, as the cost of production and freight rates still remain high. The supply situation is good at the present time in most sections.

### Potash

With all the leading producers under contract for the coming year, there still is no surplus material available and actual shortages for quick shipment are still reported in certain areas. It is expected this situation may exist for another 30 days.

## CHARLESTON

**Prospects for Future Nitrogen Supplies Improving. Strikes Hamper Phosphate Rock Output. Larger Supply of Potash Expected**

*Exclusive Correspondence to "The American Fertilizer"*

CHARLESTON, June 20, 1949.

Organic nitrogen prices continue firm and interest fairly active. Mineral nitrogen appears to be in plentiful supply at present with prospects for the new season much brighter than during the previous year. Potash demand continues steady with contracts being made at a heavy rate. Superphosphate in certain areas continues temporarily short with prospects for the new season that supplies will be adequate.

*Organics.*—The price of Chicago sewage sludge has recently been announced at $2.25 per unit of ammonia ($2.73 per unit N) and 40 cents per unit of A.P.A., f.o.b. Chicago. Nitrogenous tankage is offered at $3.15 to $4.00 per unit of ammonia ($3.83 to $4.86 per unit N), f.o.b. production point, depending on the location. One producer of nitrogenous tankage is reported in comfortable sales position with production sold up through December. Imported organics continue at price levels too high to interest domestic buyers.

*Castor Pomace.*—The producers of castor pomace continue in a sold-up condition. Movement is against existing contracts and the market is nominally $21.00 per ton, in bags, f.o.b. northeastern production points.

*Dried Ground Blood.*—The Chicago market is quiet at $7.25 to $7.50 per unit of ammonia ($8.82 to $9.12 per unit N), in bulk. The New York market is nominally $8.00 per unit of ammonia ($9.72 per unit N) in bulk with little trading being done.

*Potash.*—Demand continues active and buyers are making contracts for the new season at a heavy rate. It is expected that increased production will permit greater spread of supplies during the coming season.

*Phosphate Rock.*—One of the largest producers of phosphate rock continues strike bound at their Florida mines, resulting in shortages of supplies among their customers. Prices continue firm and subject only to reductions in the cost of oil at the mines.

*Superphosphate.*—Production in certain areas of the southeast and Midwest continues curtailed, due to labor difficulties at the phosphate rock mines. Prices continue firm and supply generally adequate.

*Sulphate of Ammonia.*—Coke oven production sulphate of ammonia continues at prices ranging from $45.00 to $48.00 in bulk f.o.b. steel mills. Synthetic material testing 21 per cent nitrogen varies in price from $50.50 to $54.50 in bulk f.o.b. southeastern and southern production points. Demand is slack except for future shipment.

*Ammonium Nitrate.*—Demand is slack and supplies adequate. No change in price has been noted.

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## PHILADELPHIA

**Some Demand for Spot Materials. Better Fertilizer Output for Coming Year Expected. Supply Situation Should Be in Better Balance**

*Exclusive Correspondence to "The American Fertilizer"*

PHILADELPHIA, June 20, 1949.

The general market shows no unusual activity although there continues to be quite some demand for prompt potash, and organics are stronger. The outlook for the coming fertilizer year is at present quite bright with an estimated consumption of about 17,500,000 tons of fertilizer. And with the removal of nitrogen control by the International Emergency Food Committee the market is felt to have the supply and demand positions in better balance than for eight or ten years past.

*Sulphate of Ammonia.*—There is good demand for future delivery and most productions are reported well under contract.

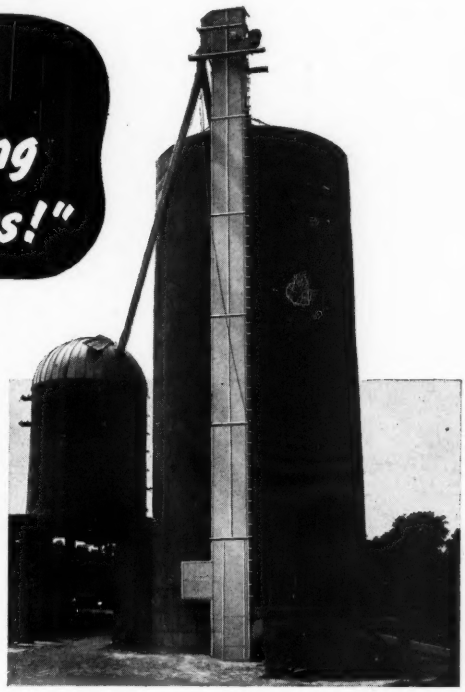
*Nitrate of Soda.*—Most of the present movement is for top dressing. With controls off in Chile and here, it is fully expected that there will be sufficient supply of this material to meet all requirements during the coming fertilizer year.

*Blood, Tankage, Bone.*—The market is considerably stronger with blood and tankage quoted at $8.25 to $8.50 per unit of ammonia ($10.02 to $10.30 per unit N). While bone is not in such urgent demand, the supply is still short of requirements and it is quoted nominally at $65.00 to $70.00 per ton. Hoof meal is quoted at $7.00 per unit of ammonia ($8.51 per unit N), in the West with little demand.

*Castor Pomace.*—There is quite a strong demand but production is all under contract and considerably behind in deliveries. There are no offerings in the open market.

*Fish Scrap.*—Menhaden 60 per cent meal is quoted at $160.00 to $180.00 per ton, with scrap slightly lower, for prompt delivery. "If and when made" is quoted at $120.00.

*Phosphate Rock.*—Labor difficulties are still not completely adjusted, and while some producers are reported behind in deliveries, there seems to be sufficient supply to meet



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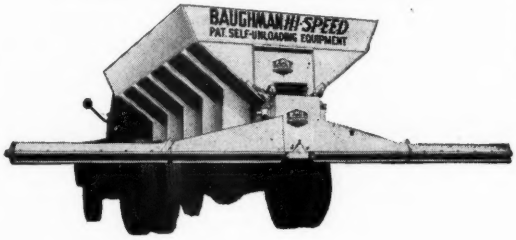


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AROUND THE WORLD

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present requirements. Some Florida prices note a reduction of ten to twenty cents per ton, but no change in Tennessee prices has been reported.

*Superphosphate.*—Shipments are normal, with price remaining at 76 cents to 77 cents per unit of Available Phosphoric Acid, and it is expected that contracts for the new fertilizer year will be at this same price range.

*Potash.*—Production is reported well sold ahead for the 1949–50 season. There is fairly active demand for prompt material but the spot supply for resale is very limited.

## CHICAGO

**Organics Market Advancing. Demand Keeping Pace with Production. Blood in Shorter Demand at Lower Prices**

*Exclusive Correspondence to "The American Fertilizer"*

CHICAGO, June 20, 1949.

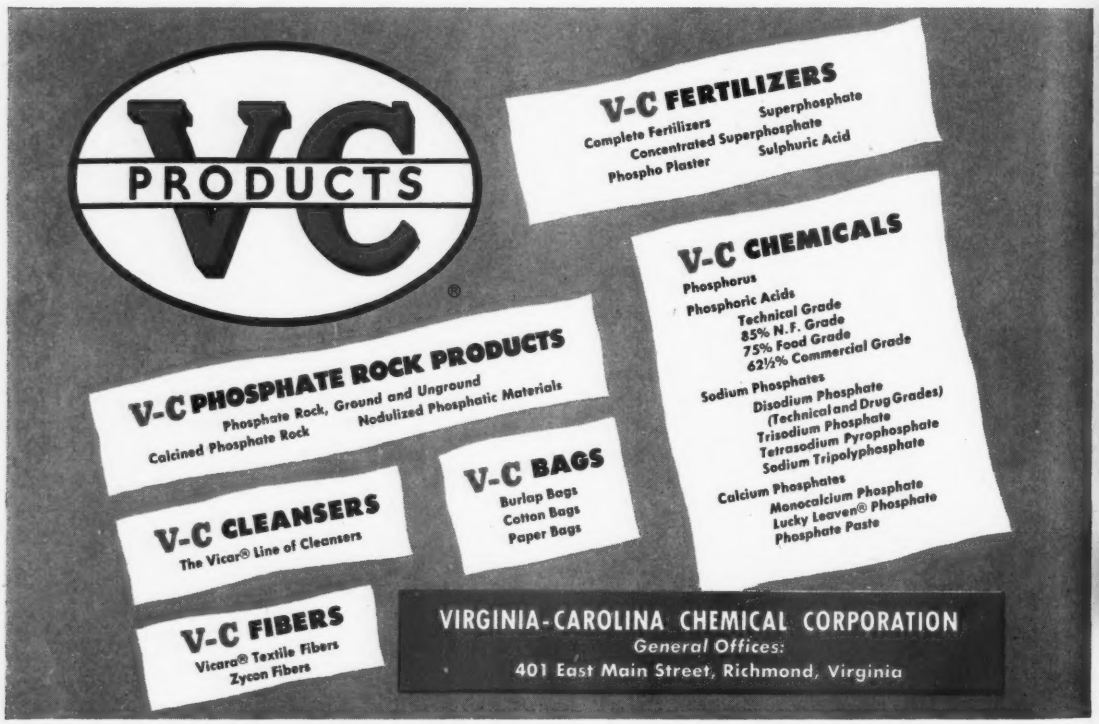
In the Chicago area the market on animal ammoniates continues in a strong position. The demand for both finished and raw materials is keeping pace with production. As a matter of fact, if anything, buying interest at present is in excess of offerings. Since last issue, prices have advanced and they are strong on all grades at the newly established levels with indications that values may reach still higher levels.

Meat scraps in the Middle West are reported selling at $130 to $140 per ton, sacked, f.o.b. plants. Digester tankage is selling at $120 to $125 per ton, sacked. Dry rendered tankage is firm at $2.30 to $2.40 per unit of protein, depending upon quality and location. Wet rendered tankage varies in price according to test. High testing material is $9.00 to $9.25 per unit of ammonia ($10.94 to $11.24 per unit N) and low testing material is $10.00 to $10.25 per unit, ($12.15 to $12.46 per unit N).

Blood is about the only item which has not advanced and does not enjoy the demand of the other products. Last business was at $7.25 per unit of ammonia ($8.82 per unit N), delivered. Steamed bone meal, 65 per cent B.P.L. is listed at $75 per ton in bags and raw bone meal, 4½ per cent ammonia, 45 per cent B.P.L., $65 per ton.

## Fertility and Corn Population

Where you place that fertilizer in the soil can make a difference in the yield of your crop, according to G. G. Pohlman, W. Va. Agronomist. Dr. Pohlman has found that



HERE AND THERE AT THE N.F.A. CONVENTION

1. Kent Leavitt. 2. Mrs. M. G. Field, H. C. Aaron, Mrs. and Mr. E. A. Geoghegan. 3. Members and guests at the Pasture Demonstration on Monday afternoon. 4. Charles H. Mahoney. 5. Russell Coleman, F. S. Lodge, William S. Ritnour.

**WORK AND PLAY AT THE GREENBRIER**

1. Dexter M. Keezer. 2. Mrs. John M. Perryman, Mrs. Paul H. Clute, Mrs. Sid Keel, Mrs. L. S. Kaniecki, Mrs. John B. Ritter. 3. C. R. Martin, A. A. Schultz. 4. Louis Bromfield.

THE FEMININE ATTRACTION AT WHITE SULPHUR SPRINGS

1. Mrs. Louise F. Mertz. 2. Mrs. Walter Crady, W. E. Snyder, Mrs. Travis S. Whitsel, Mrs. Burton A. Ford, Mrs. W. B. Porterfield, Burton A. Ford. 3. Mrs. L. V. Steck, Mrs. W. S. Tyler, George W. Huldrum, L. V. Steck. 4. Mrs. Weller Noble.

**INDUSTRY EXPERTS AT THE N.F.A. MEETING**

**1. K. D. Jacob, W. G. Hewitt. 2. George N. Hoffer. 3. Dean R. Gidney, William Lehman. 4. Russell Coleman.**

**That Extra Ear of Corn . . . the ability to produce two ears where only one grew before . . . is the goal of the modern farmer**

Today, by the use of good commercial fertilizers, farmers are reaping greater harvests per acre than ever before. They have found by experience that ample use of good fertilizer means extra dollars in the bank.

**That Extra Protection**

# RAYMOND MULTI-WALL PAPER SHIPPING SACKS

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means a saving to the packer, shipper, dealer, and user. These Fertilizer Shipping Sacks practically eliminate damage and seepage loss, for they are sift-proof, dust-proof, and water-resistant.

If you are a producer, packer, or shipper of fertilizer, investigate Raymond Shipping Sacks. They are Custom Built in various types, sizes, and strengths, printed or plain.

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best returns resulted when nitrogen was applied on top and phosphates at plow depth. Potash showed no difference between top and bottom. How many stalks of corn should be planted to the hill depends upon natural fertility, fertilizer applied, and the season. At Lakin where 1,000 lbs. of 5-10-10 were applied, the yield of corn was 85 bushels where planted three stalks to the hill. Where no fertilizer was applied, the yield was 42 bushels for a 3-stalk planting, 41 for a 4-stalk planting, and 34 bushels for a 5-stalk planting. Dr. Pohlman concludes that, "On soils that are fertile or that have been made so with large applications of fertilizers, farmers may expect greatest returns from planting 5 stalks to the hill."—*W. Va. Ext. Release, January 31, 1949.*

## Davison Moves Baltimore Offices to New Quarters

On Monday, June 20th, The Davison Chemical Corporation, Baltimore, Maryland, opened for business at a new location in their home city. The Baltimore general offices and headquarters now occupy six floors in the newly renovated and air-conditioned Davison Chemical Building, Charles and Fayette Streets, Baltimore 1. The postal address, however, continues as The Davison Chemical Corporation, Baltimore 3, Maryland.

The new building was purchased by Davison over three years ago, for a permanent home, but the Corporation was unable to occupy until now because of the shortage of materials necessary to its rehabilitation. Erected in 1898, The Davison Chemical Building is a 12-story structure located in the heart of Baltimore's business district. Its total floor area is 50,000 square feet, of which Davison will occupy 25,000—the entire seventh, eighth, ninth, tenth, eleventh and twelfth floors.

Davison's manufacturing and research activities at Baltimore's Curtis Bay plant will, of course, remain at that location.

## Cotton Council Urges Use of Cotton Fertilizer Bags

Commercial fertilizer packaging affords the cotton farmer a potential market for an additional 260,000 bales of lint annually, the National Cotton Council has stated, urging farmers to demand that plant foods be delivered to them in cotton containers.

In an illustrated message to cotton growers and allied groups, the Council pointed out that although Cotton Belt farmers used more than half of the commercial fertilizers sold in the United States last year, only 16,000 bales of cotton went into fertilizer bags.

The Council said that the packing of fertilizer in cotton bags would benefit agriculture, industry, and labor in the eighteen Cotton Belt states through the expanded market. Each 5000 tons of fertilizer packaged in cotton bags would require 18,400 hours of farm labor, 7780 hours of cotton mill labor, and 1171 hours of bag factory labor, a total of 27,351 man hours. The fertilizer industry produces 15 million tons annually.

Farmers are urged by the Council to buy

## Classified Advertisements

WANTED: Fertilizer Plant. Purchase outright or purchase interest. Address "270" care THE AMERICAN FERTILIZER, Philadelphia 7, Pa.

WANTED: Representative, preferably 25–40 years of age, with chemical training, agricultural background, and fertilizer industry experience for nitrogen sales, service and development work in Midwest area. Address "275" care THE AMERICAN FERTILIZER, Philadelphia 7, Pa.

WANTED: Representative for nitrogen sales, service and development work in Southeastern area, 25–40 years of age, with chemical, agricultural and fertilizer industry training and experience. Address "280" care THE AMERICAN FERTILIZER, Philadelphia 7, Pa.

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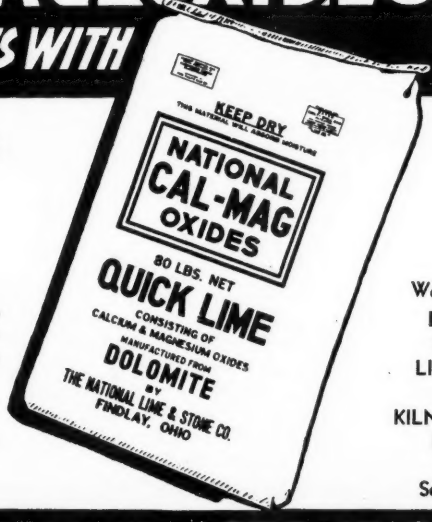


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CaO 58.07
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DOLOMITIC HYDRATED LIME (165 TNP)
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KILN DRIED RAW DOLOMITE (107 TNP)
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fertilizer only in cotton bags, which in turn would result in the sale of more cotton by farmers to the fertilizer industry.

Although the cost of fertilizer in cotton sacks is slightly higher, the additional value of the bags as seed storage sacks, pick sacks, or dairy towels more than offsets the price difference, the Council statement said.

Copies of the circular were distributed to fertilizer dealers and manufacturers, county agents, county and state Farm Bureau presidents, vocational agriculture teachers, and field managers of the National Council of Farmer Co-Operatives in the Cotton Belt.

## April Superphosphate

Figures compiled by the U. S. Bureau of Census and the National Fertilizer Association show that the production of superphosphate during April maintained the high daily average established during the previous month. The output of 994,733 tons (basis 18 per cent A. P. A.) was only 20,000 tons under the 1,015,320 tons manufactured during March and about the same amount ahead of the March 1948 production of 977,972 tons. Shipments to dry mixers and the amounts used by the producing plants in their own mixtures amounted to 1,181,692 tons. leaving stocks on hand at acidulating plants of 807,726 tons. The production of 8,598 tons of wet base goods set a record for a single month's output.

| | Normal 18% A.P.A | Concentrated 45% A.P.A. | Base Goods 18% A.P.A. |
|---|---|---|---|
| Production | Tons | Tons | Tons |
| April, 1949 | 876,555 | 43,832 | 8,598 |
| March, 1949 | 902,464 | 41,848 | 8,236 |
| April, 1948 | 872,400 | 39,208 | 7,552 |
| Shipments and Used in Producing Plants | | | |
| April, 1949 | 1,061,740 | 43,745 | 10,589 |
| March, 1949 | 1,169,099 | 44,746 | 12,104 |
| April, 1948 | 916,410 | 36,990 | 10,201 |
| Stocks on Hand | | | |
| April 30, 1949 | 650,910 | 61,825 | 2,253 |
| March 31, 1949 | 823,253 | 61,738 | 5,309 |
| April 30, 1948 | 799,904 | 65,642 | 3,009 |

## Virginia Corn Fertilizer Recommendations

The following six rules are given by Virginia Extension Specialists for increasing corn yields: (1) Prepare a good seedbed. (2) Apply 400 to 500 lbs. per acre of 3-12-6 or 2-12-12 fertilizer before planting. Broadcast and plow or disc it in, or apply with a grain drill. Use an additional 300 to 400 lbs. of the same analysis in the row at planting. Where manure is available, 10 tons of manure per acre supplemented with 500 lbs. of 20 per cent superphosphate may be used in place of the above commercial fertilizer, except that put in the row at planting. (3) Plant Hybrid corn. (4) Plant at least 12,000 to 14,000 stalks per acre. (5) Cultivate shallow to avoid cutting off roots. (6) Apply 50 to 80 lbs. of nitrogen as a sidedressing when corn is about knee-high.—*Virginia Extension Circular 464.*

## St. Regis Develops New Moisture-Proof Kraft Bag

The Research and Development Department of St. Regis Paper Company, working in conjunction with technicians of the Du-Pont Company, has developed a new process for coating kraft papers with synthetic resins, most notably polyethylene, which promises to open new and important markets for the use of the multiwall bag.

The Packaging Division of St. Regis has long recognized the benefits to be obtained from the use of resin coated plies for multiwall paper bags, but heretofore the high cost of the application has proved a barrier to the broad expansion in this type of package.

With its new coating operation in production, St. Regis reports that it is in a position to provide, on an economic basis, a multiwall bag containing a sheet of kraft paper coated with polyethylene for many heretofore unpackable or hard to pack materials.

The characteristics of the polyethylene multiwall bag, it is pointed out, make it a superior container for the packaging of hygroscopic materials, particularly in the chemical and food fields, and notably for the pro-

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Founded 1834
All-Steel Self-Contained Fertilizer Mixing Units
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# Proof... OF THE PUDDING!

## Fulton MULTIWALLS WIN HIGH PRAISE FROM LARGEST USERS IN THE INDUSTRY

The impressive list of multiwall orders we have filled at our new plant in New Orleans would be the quickest and best way we know to tell you the wonderful success story of Fulton Multiwall Paper Bags.

Voluntary comment received from these quantity users of multiwalls speaks for itself. Generous compliments on the clean cut appearance, workmanship and uniform quality of Fulton Multiwalls is conclusive evidence they have passed the final test with flying colors.

Give us the opportunity to win a compliment from you. Try Fulton on your next order for Multiwalls — pasted or sewed bottom, open or valve type — we make them all.

***Call on us also for your requirements in cotton or burlap bags including waterproof paper lined textile bags.***

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tection of original fresh-packed quality in the food field.

Multiwall bags containing polyethylene coatings have been in commercial use for over a year and the success attained has indicated, the company reports, that the improved moisture and grease-proof protection provided by bag walls coated with this synthetic resin marks an outstanding advance in the technology of multiwall bags.

The polyethylene coating, according to St. Regis researchers, is the best yet developed in the whole field of paper coatings for packaging purposes. It is pointed out that polyethylene to a substantial degree is unaffected by acids and alkalis, provides an excellent grease and oil barrier and is odorless and tasteless.

The company states that in addition to its efficiency as a moisture-proof, grease-proof and chemically inert substance in multiwall bags, polyethylene also strengthens the sheet to which it is applied.

The efficiency of the polyethylene coated bag has been tested and approved under actual conditions in a number of plants of customers of St. Regis. These tests included the packing of meat trimmings, calcium chloride, powdered milk and synthetic resins.

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## THE N. F. A. CONVENTION

(Continued from page 8)

### Annual Dinner

The Annual Dinner of the Association wsa held on the evening of June 14th. Charles S. Rauh, of E. Rauh and Sons Fertilizer Co., occupied the toastmaster's chair and introduced a number of distinguished guests. These included Hon. Nellie Ross Taylor, Director of the U. S. Mint; B. D. Cloaninger, president of the Association of American Fertilizer Control Officials; Charles C. Concannon, of the Department of Commerce; K. D. Jacob, chief of the fertilizer division, Bureau of Plant Industry, Beltsville, Md.; W. F. Watkins, agronomist, Economic Cooperation Administration; Lewis G. Porter, U. S. D. A.; J. H. Stallings, Soil Conservation Service; and Colin W. Whitaker, Bureau of Plant Industry, Beltsville; H. B. Mann, President, and J. W. Turrentine, President-emeritus of the American Potash Institute.

An especial welcome was given to two former N. F. A. presidents who have now retired from active service and are Honorary Members of the Association: Charles H. MacDowell, former president of Armour Fertilizer Works, and Harry B. Baylor, former Vice-president of International Minerals and Chemical Corporation.

Door prizes were awarded to ladies attending the annual dinner, and Mrs. Sidney Keel, Atlanta, won a lapel watch. Mrs. H. B. Mann, Washington, received a portable radio, while a handbag went to Mrs. Charles Rose, Blytheville, Ark., and a parasol to Mrs. Graham Dudley, Memphis. The entertainment which followed featured a clever exhibition of sleight-of-hand by Paul Fleming, magician.

### *Second General Session, June 15th*

Dr. Russell Coleman, President of the N. F. A., opened the Wednesday session with a talk entitled "Our Industry's Safeguards" in which he called for unceasing vigilance to preserve the industry's freedom of action. Dr. Coleman's address is given in full in this issue.

The sales problems which may face the industry in the future were discussed by Dexter M. Keezer, director of the department of economics, McGraw-Hill Publishing Co., speaking on "The Business Outlook, with Particular Reference to Capital Expenditures."

By the end of the year, wartime shortages will have been eliminated and business will face the necessity of efficient selling, he predicted. However, he warned against apportioning sales efforts, such as advertising, to the volume of sales, adding that business suicide would result unless the efforts made are in tune with the maintenance of profitable levels.

As did many of the other convention speakers, Mr. Keezer urged educational campaigns, particularly to dispel the popular notion that industrial earnings go to fatten the executives. An intensified corporate tax program, he warned, could wreck industry and general prosperity alike. Heavier taxes would preclude rebuilding of plants and pro-

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viding of new equipment, money for which has recently been drawn from profits.

Proposed Government provision of equipment would fall short of an adequate solution, he said, because it is opposed to the principles of individual freedom and dignity.

As the convention's final speaker, Kent Leavitt, president of the National Soil Conservation Districts, outlining the activities of his organization in his address, "Conservation, Proper Land Use and Fertilizer," gave as the theme of the conservation program combating the problem of more people and less land.

The fertilizer industry, he said, can cooperate in developing a new science of proper land use, applying this science to every available acre. Even though fertilizer consumption might lessen as conservation grows, because erosion now eats fertilizer away, the industry would still benefit from more intelligent use of plant food.

Mr. Leavitt declared himself in favor of developing proper land use without changing our form of government. We want a big program, he said, with every citizen helping through the growing conservation district program, not through mandatory legislation or through Nationwide subsidies. Some government assistance is needed, of course, but in such substantial measure as is found in, say, Great Britain, today.

Land properly used can produce a perpetual income for the farmer and Nation.

## N. F. A. OLYMPICS

(Continued from page 11)

phia; Mrs. E. A. Geoghegan, New Orleans, and Mrs. Sidney Keel, Atlanta.

### Prize Donors

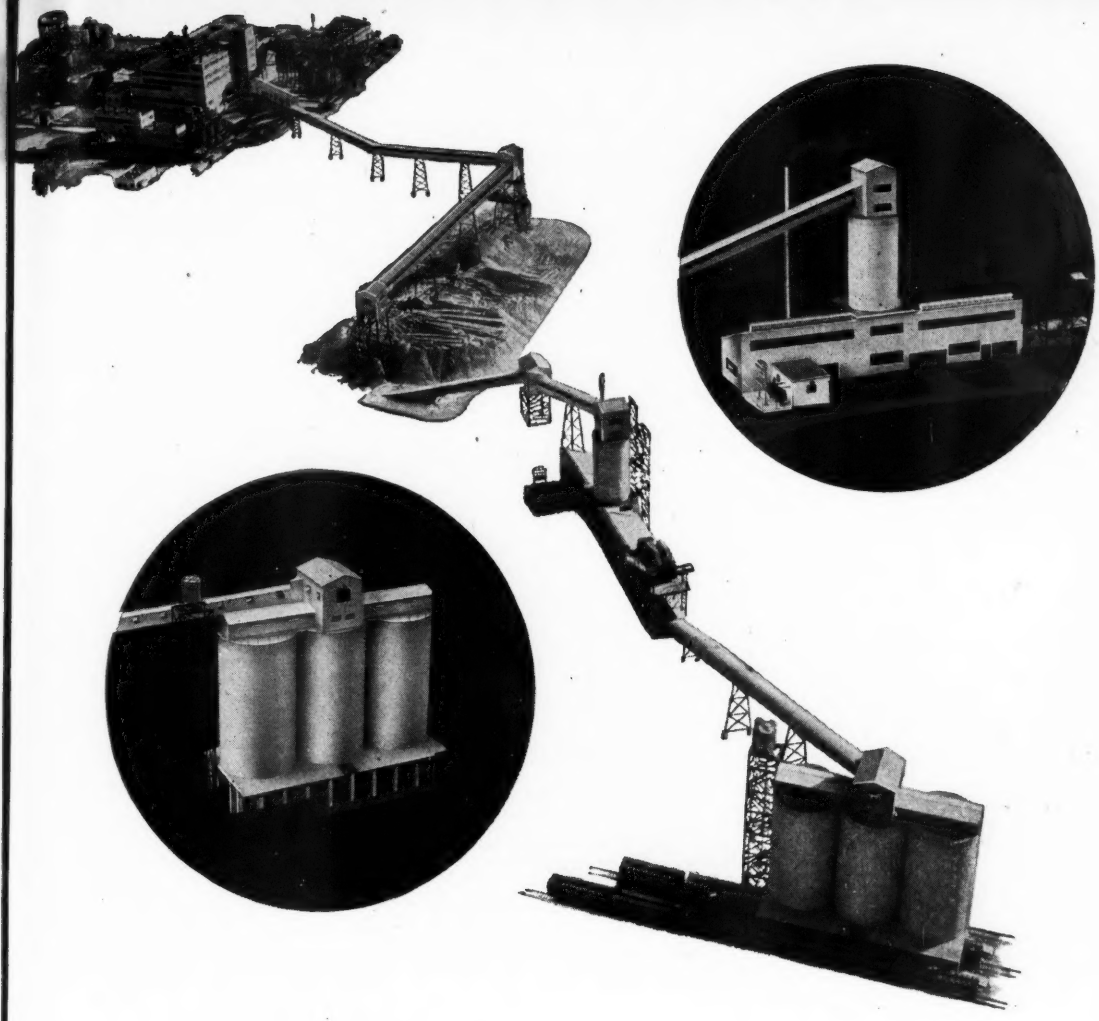
Convention Prizes: "Agricultural Chemicals"; Allen Scale Co.; Allied Chemical & Dye Corp., The Barrett Division; American Cyanamid Co.; American Potash & Chemical Corp.; Arkell & Smiths; Ashcraft-Wilkinson Co.; Atlanta Utility Works; H. J. Baker & Bro.; Bemis Bro. Bag Co.; Chase Bag Co.; Chilean Nitrate Sales Corp.; Combustion Engineering Co., Inc.; Raymond Pulverizer Division; Coronet Phosphate Co.; Dowling Bag Co.; E. J. duPont de Nemours & Co.; French Potash & Import Co., Inc.; Fulton Bag & Cotton Mills; Georgia Fertilizer Co.; Georgia Lead Works, Division of National Lead Co.; The Frank G. Hough Co.; Hydrocarbon Products Co., Inc.; International Minerals & Chemical Corp., Phosphate Rock Division; International Minerals & Chemical Corp., Potash Division; International Paper Co., Bagpak Division; Kraft Bag Corp.; Lion Oil Co.; Mathieson Chemical Corp.; Mente & Co., Inc.; Nicolay Titlestad Corp.; Phillips Chemical Co.; Potash Company of America; Schmutz Manufacturing Co., Inc.; St. Regis Sales Corp., Multiwall Bag Division; Sturtevant Mill Co.; Spencer Chemical Co.; Swift & Company, Plant Food Division; Synthetic Nitrogen Products Corp.; Texas Gulf Sulphur Co.; Union Bag & Paper Corp.; Union Special Machine Co.; U. S. Phosphoric Products Division, Tennessee Corp.; United States Potash Co.; Worthan Bag Corp.

## OUR INDUSTRY'S SAFEGUARDS

(Continued from page 9)

demands placed upon our industry will probably be more imperative than those made upon any other industrial group. Therefore, to meet these demands will not only require the best ingenuity of the individual members of our industry, but will involve even closer relationship and demand a better understanding among our industry and the farmer, the agricultural leaders, the general public, and our elected representatives in government.

Before our industry can meet its obligation, our Government must understand industry's problems and also recognize government's responsibility. Our Government should not only allow but encourage the production of all commercial fertilizers by the industry, which has demonstrated that it can produce and distribute fertilizer cheaper than government-operated plants. In order to aid industry the Government should plan its agricultural programs far enough in advance so that industry might plan its research, educational and production programs to work more closely with Federal and State agencies.



# **New** Drying and Storage Plant at Noralyn Phosphate Mine

Larger tonnages of high grade phosphate than ever before are now available from International's Florida mines as a result of the completion of new drying and storage facilities at the new Noralyn Mine.

Phosphate from the Noralyn Washer and Flotation Plant is carried by overhead belt conveyors and distributed by grades on wet storage. From an underground tunnel, selected material is conveyed to the drying plant shown in the photo at upper right where it is dried to standard specifications. It is then conveyed to the storage silos shown in the lower left photo where it is loaded automatically into rail cars.

The modern new drying and storage plant at Noralyn Mine will increase production capacity, speed deliveries, and improve service to buyers of International's Florida Phosphate for agricultural and industrial markets, domestic and foreign.

International Minerals & Chemicals

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Tennessee Phosphate **ALL COMMERCIAL GRADES** Florida Pebble Phosphate

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To safeguard industry's and the Nation's freedom certainly requires a recognition by government of a profit system which allows industry a reasonable return on its investment, which provides for a continuing wage scale for a high standard of living to labor, and at the same time allows adequate maintenance and improvement of the physical plant and the tools necessary for efficient production. In the words of James H. McGraw of McGraw-Hill Publishing Company—the Government must "make it possible for American industry to do its job—not to terrorize private industry with proposals of ruinous taxation and paralyzing controls and threats of nationalization. For American industry is not a thing apart from the American people any more than is government. American industry is the life-blood of the American people and whatever makes industry do its work better contributes more to the common welfare than a bureaucratic government can ever hope to do."

The fertilizer industry's obligations must not be underestimated. They must be recognized and met in the future as in the past if the industry's freedom is to be maintained. Here are a few of the things which mustbe done with increased vigilance.

1. *Continued support and further encouragement of research.* Research directed and supported by individual companies and closely aligned with enlarged research program by the U. S. Department of Agriculture should improve even further the fertilizer materials and should solve many problems connected with mixing. Industry's encouragement and support must continue to be given to our agricultural research agencies in determining what plant food elements or combinations of elements are needed for soil fertility maintenance.

2. *Plant development and improvement.* The facilities for producing in adequate amounts those fertilizers found most efficient for increasing crop production and maintaining soil fertility must continue to be built in order to produce even more efficiently those fertilizers which are required for an intensified agriculture. And, as in the past, savings in improved quality and efficiency will be passed on to the farmer.

3. *A more completely coordinated program of education.* To develop the most effective program in educating the farmer in soil management, it is necessary for our industry to better understand the aims and objectives of the various agricultural educational agencies and to work even more closely together toward implementing a better usage of fertilizers. The nonagricultural public also needs educating on what chemical fertilizers are composed of, how they are produced, and how important they are to the welfare of every human being.

4. *The Congress must be better informed on fertilizers and the fertilizer industry.* Individual members of the industry should take advantage of every opportunity for informing their congressmen of the advancements as they are made in the industry. Frequent visitations to congressmen showing the progress made in fertilizer plants should be a part of our educational program. Supplying factual information to Congress and congressional committees in the future, as in the past, is a necessity.

Most of the requirements for safeguarding our industry's freedom must be accomplished on an individual basis with each member meeting his own responsibility. However, there are many jobs which cannot be done except through a central organization working for the common good of all. So your National Fertilizer Association has a definite part to play. It is responsible for:

Promoting more efficient use of fertilizer to maintain the productivity and fertility of our soils; for keeping our industry, agriculture and government abreast of developments in each field; for fostering a better understanding of mutual problems among all parties and encouraging a clear recognition of the rights and responsibilities of each agency;

Creating public good will for the industry by dissemination of significant facts regarding its operations and products; and

Protecting the industry in its right to function as a part of the private enterprise system which has made America great.

The industry and its Association have enviable records for the past, and I am confident that they will meet the demands of the future, whatever they be. My hope is that each of us will be vigilant and thus safeguard the freedom of our industry and our Nation. "The condition under which God hath given liberty to man is eternal vigilance," said John Philpot Curran "which condition, if he break, servitude is at once the consequence of his crime and the punishment of his guilt."

To this end let us pledge ourselves so that we can say for the future as we can say for the past our industry has done its part to safeguard its own freedom and in so doing has helped maintain our country's leadership.

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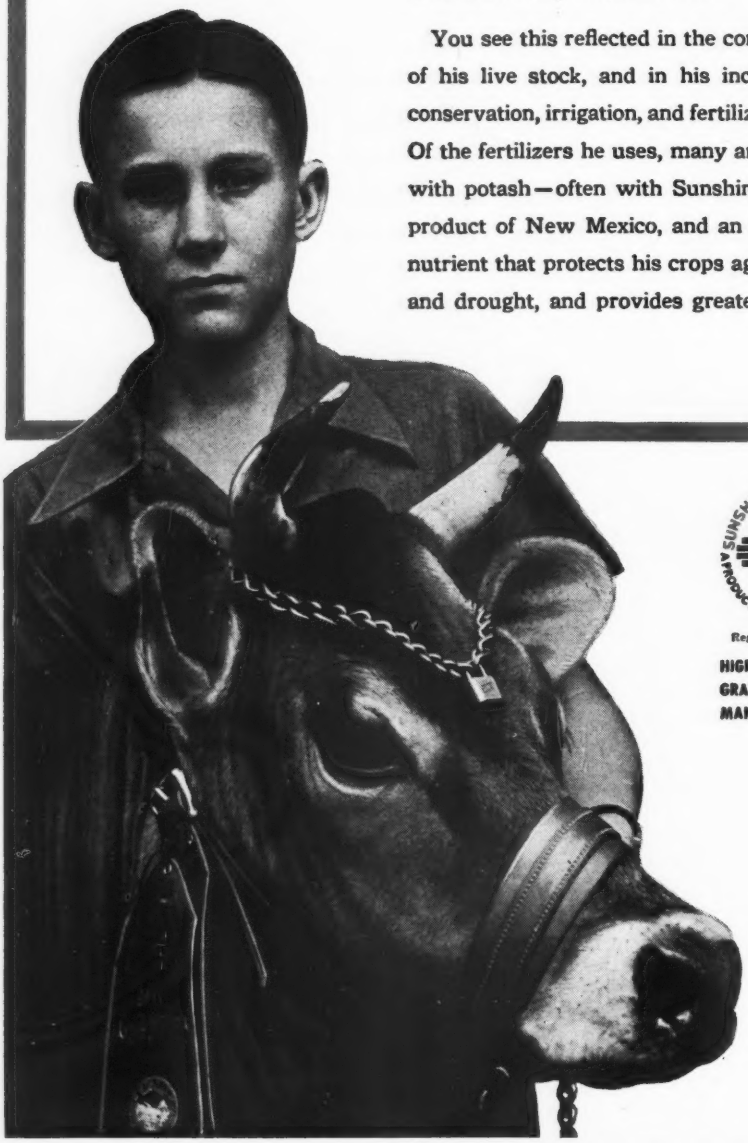
You see this reflected in the constant improvement of his live stock, and in his increased use of conservation, irrigation, and fertilization on his land. Of the fertilizers he uses, many are compounded with potash—often with Sunshine State Potash, a product of New Mexico, and an outstanding soil nutrient that protects his crops against plant diseases and drought, and provides greater soil fertility.



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**BUCKETS—Elevator**
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Commercial Solvents Corp., New York City
Davison Chemical Corporation, Baltimore, Md.
Huber & Company, New York City
International Minerals & Chemical Corporation, Chi
Lion Oil Company, El Dorado, Ark.
McIver & Son, Alex. M., Charleston, S. C.
Pittsburgh Agricultural Chemical Co. Pittsburgh, Pa.
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Southern States Phosphate & Fertilizer Co., Savannah, Ga
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Stedman's Foundry and Machine Works, Aurora, Ind.

A Classified Index to Advertisers in "The American Fertilizer"

# BUYERS' GUIDE

For an Alphabetical List of all the Advertisers, see page 37

**HOPPERS**
Atlanta Utility Works, The, East Point, Ga.
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Stedman's Foundry and Mach. Works, Aurora, Ind.
Sturtevant Mill Company, Boston, Mass.

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Pittsburgh Agricultural Chemical Co. Pittsburgh, Pa.

**LEAD BURNERS**
Southern Lead Burning Co., Atlanta, Ga.

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National Lime & Stone Co., Findlay, Ohio

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Stedman's Foundry and Mach. Works, Aurora, Ind.
Sturtevant Mill Company, Boston, Mass.

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Bradley Pulverizer Co., Allentown, Pa.
Kent Mill Co., Brooklyn, N. Y.
Sackett & Sons Co., The A. J., Baltimore, Md.
Stedman's Foundry and Mach. Works, Aurora, Ind.
Sturtevant Mill Company, Boston, Mass.

**MACHINERY—Material Handling**
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Ashcraft-Wilkinson Co., Atlanta, Ga.
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International Minerals & Chemical Corporation, Chicago, I
United States Potash Co., New York City

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# BUYERS' GUIDE

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Atlanta Utility Works, The, East Point, Ga.
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Southern States Phosphate Fertilizer Co., Savannah, Ga.
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Ashcraft-Wilkinson Co., Atlanta, Ga.
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**TAGS**
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Ashcraft-Wilkinson Co., Atlanta, Ga.
Baker & Bro., H. J., New York City
Davidson Commission Co., The, Chicago, Ill.
International Minerals & Chemical Corporation, Chicago, Ill.
Jackle, Frank R., New York City
McIver & Son, Alex. M., Charleston, S. C.
Woodward & Dickerson, Inc., Philadelphia, Pa.

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## Alphabetical List of Advertisers


American Agricultural Chemical Co., New York City ..... 4
American Potash and Chemical Corp., New York City ..... 5
Armour Fertilizer Works, Atlanta, Ga. ..... —
Ashcraft-Wilkinson Co., Atlanta, Ga. ..... 25
Atlanta Utility Works, The, East Point, Ga. ..... 29
Baker & Bro., H. J., New York City ..... Front Cover
Baughman Mfg. Co., Jerseyville, Ill. ..... 17
Bemis Bro. Bag Co., St. Louis, Mo. ..... 3
Bradley Pulverizer Co., Allentown, Pa. ..... 24
Chemical Construction Corp., New York City ..... 25
Commercial Solvents Corp., Agricultural Div., New York City ..... 2nd Cover
Davidson Commission Co., The, Chicago Ill. ..... 29
Davison Chemical Corp , The, Baltimore Md. ..... —
Fulton Bag & Cotton Mills, Atlanta, Ga. ..... 23
Gascoyne & Co., Inc., Baltimore, Md. ..... 34
Hayward Company, The, New York City ..... 34
Huber Co., L. W. New York City ..... —
International Minerals & Chemical Corporation, Chicago, Ill. ..... 27
International Paper Co., Bagpak Div., New York City ..... Back Cover
Jaite Company, The Jaite, Ohio ..... —
Jackle, Frank R., New York City ..... 14
Keener Mfg. Co., Lancaster, Pa. ..... 34
Keim, Samuel D., Philadelphia, Pa. ..... 33
Kent Mill Co., Brooklyn, N. Y. ..... 29
Kraft Bag Corporation, New York City ..... —
Kramarsky Corp., Felix, New York City ..... 29
Lion Oil Company, El Dorado, Ark. ..... 6
McIver & Son, Alex. M., Charleston, S. C. ..... 21
Monarch Mfg. Works, Inc., Philadelphia, Pa. ..... 34
Monsanto Chemical Co., St. Louis, Mo. ..... —
National Lime & Stone Co., Findlay, Ohio ..... 21
Potash Co. of America, New York City ..... 3rd Cover
Quaker Oats Company, Chicago, Ill. ..... 25
Raymond Bag Co., Middletown, Ohio ..... 19
Sackett & Sons Co., The A. J., Baltimore, Md. ..... 26
Schmutz Mfg. Co., Louisville, Ky. ..... —
Shuey & Company, Inc., Savannah, Ga. ..... 34
Southern Lead Burning Co. Atlanta, Ga. ..... 29
Southern States Phosphate & Fertilizer Co., Savannah, Ga. ..... —
Spencer Chemical Co., Kansas City, Mo. ..... —
Stedman's Foundry and Machine Works, Aurora, Ind. ..... 22
St. Regis Paper Co., New York City ..... —
Tennessee Corporation, Atlanta, Ga. ..... —
Texas Gulf Sulphur Co., New York City ..... —
Titlestad Corporation, Nicolay, New York City ..... —
U. S. Phosphoric Products Division, Tennessee Corp., Tampa, Fla. ..... 29
United States Potash Co., New York City ..... 30
Universal Vibrating Screen Co., Racine, Wis. ..... —
Virginia-Carolina Chemical Corp., Richmond, Va. ..... 18
Wiley & Company, Inc., Baltimore, Md. ..... 34
Woodward & Dickerson Inc., Philadephia, Pa. ..... 20



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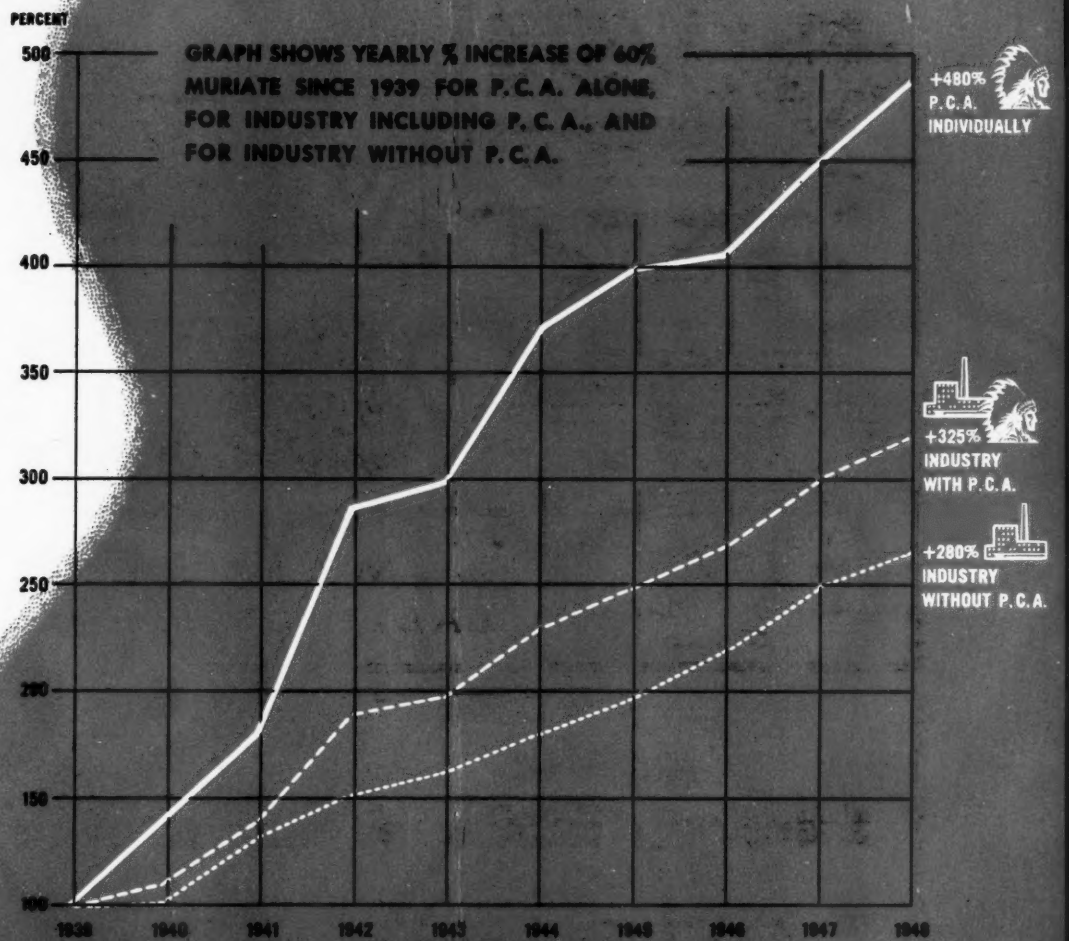
# We've been doing some figuring...




1948 was a record year for domestic Potash. Using '39 as a base, the industry—not including P.C.A.—showed an increase of 280% in 60% Muriate. P.C.A. production lifts the industry increase to 325%. ***P.C.A. alone shows a High Grade Muriate increase for the same period of 480%.***

95% of all P.C.A.'s '48 deliveries were in the form of 60% Muriate. Our new $4,000,000 production and refining facilities now are operating. Our deliveries for '49-'50 will break all previous records. In fact, P.C.A.'s production capacity for 60% Muriate this year will exceed by some 150,000 tons the entire potash consumption — all grades — of the nation ten years ago.

These figures are graphic evidence of the leadership P.C.A. has won . . . leadership in volume, in economy to you and to agriculture.

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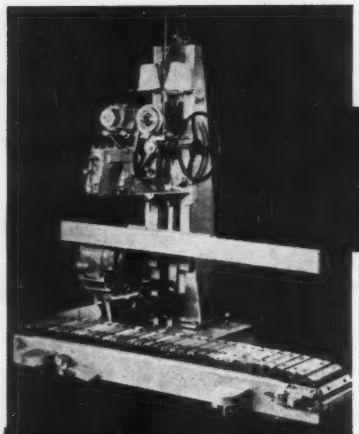
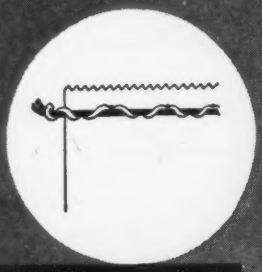


**MODEL "E 1"** (portable)—one operator can close up to 15 filled bags per minute. A single foot pedal controls both conveyor and sewing head. Handles both paper and textile bags.

**Mechanize your closing of heavy-duty, multiwall paper bags, with BAGPAKERS.® You swing into production line speed—up to 15 bags per minute. BAGPAKERS apply famous "cushion-stitch" closure that absorbs strains and won't pull out. When sealed with strong BAGPAKER tape, the "cushion-stitch" closure is moisture-resistant, contamination-proof and *sift-proof*.**

**Talk over your closing and handling methods . . . your multiwall paper bag requirements, with a BAG-PAK engineer. He knows ways to speed operations and cut costs.**



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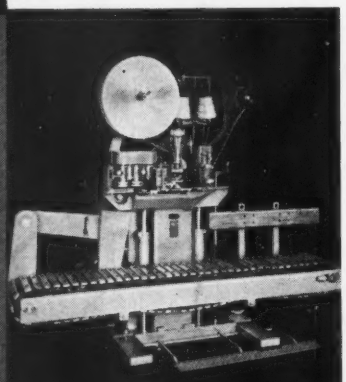
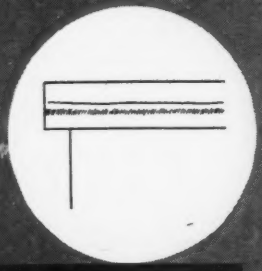


**MODEL "DA"** (portable) applies taped "cushion-stitch" closure. One operator, filling and closing, can handle 2 to 4 bags a minute . . . 6 to 12 where filled bags are delivered to BAGPAKER conveyor. Sewing operation starts and stops automatically—no tape wasted.



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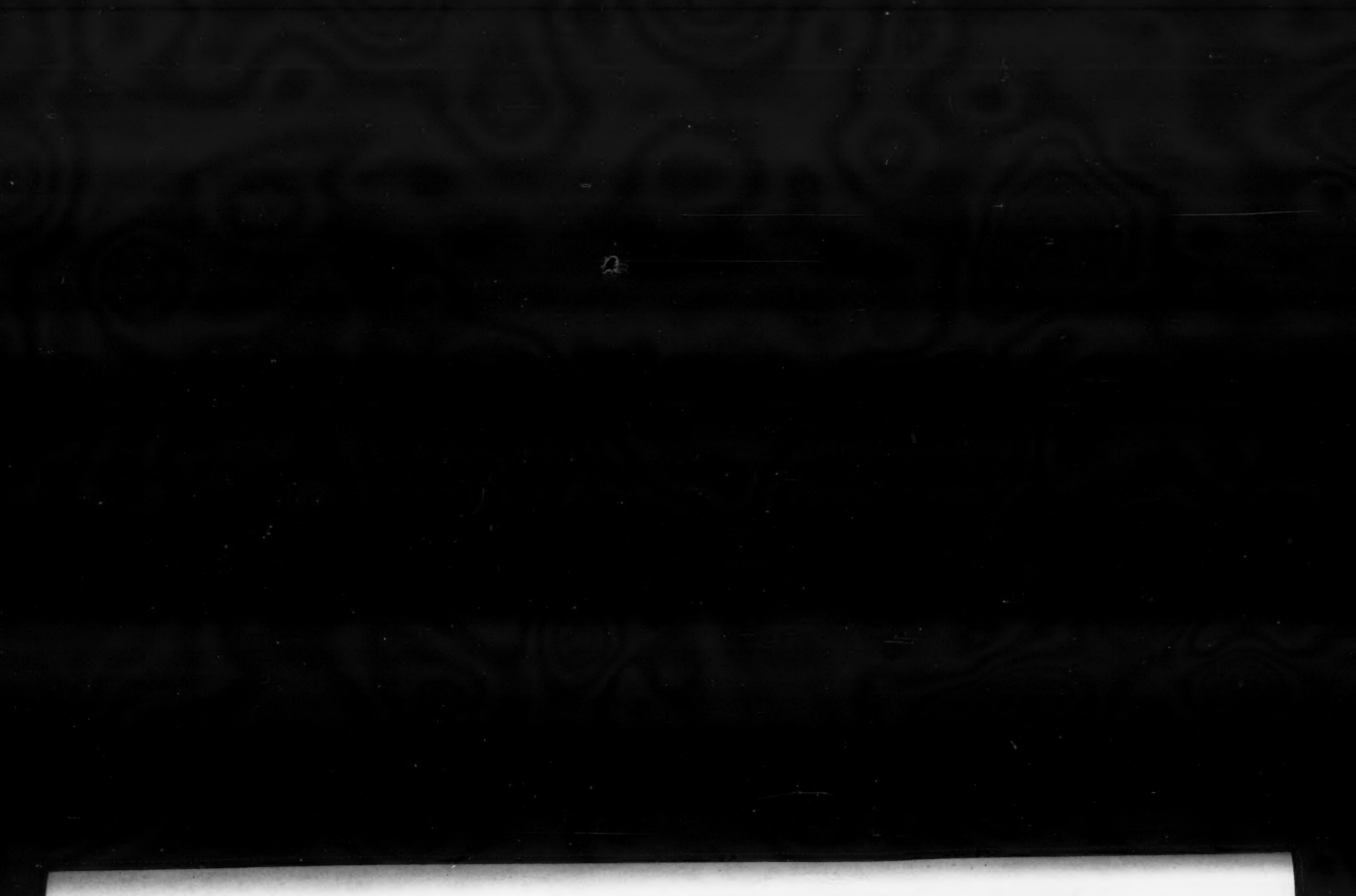
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